

CALIFORNIA HOUSEHOLD TRAVEL SURVEY (CHTS)

INTRODUCTION

The California Department of Transportation (Caltrans), Metropolitan Planning Organizations (MPOs), and Regional Transportation Planning Agencies (RTPAs) conduct major household travel surveys every ten years to obtain detailed information regarding household socio-economic characteristics and travel behavior of households across the State. Caltrans hired the Main Survey Contractor (NuStats, Inc.) to design, test, and conduct an advanced regional and inter-regional household travel survey of up to 60,000 California households. In addition, SCAG hired a consultant (Abt-SRBI, Inc.), to increase the number of survey samples within the SCAG Region. The implementation of the California Household Travel Survey (CHTS) is based on procedures that have been tested and refined through a full pre-test of the survey design conducted by the Main Survey Contractor.

The purpose of the CHTS is to update the statewide database of household socioeconomic and travel behavior used to estimate, model, and forecast travel throughout the State. Traditionally, the CHTS has also provided multi-modal survey information to monitor, evaluate and make informed decisions regarding the State's transportation system. The 2010 CHTS is a household and diary type survey, which will provide data on regional trip activities and inter-regional (long-distance) trips for use in the development of the statewide model and regional travel demand models. This data will address both weekday and weekend travel. The CHTS will be used to update the Statewide Travel Demand Model (STDM), to develop the information for the 2010 baseline analysis, perform 2015, 2020, 2035, and 2040 greenhouse gas (GHG) emission analyses, calibrate on-road fuel economy and fuel use, and enable agencies to comply with Senate Bill 375 (SB 375) and Senate Bill 391 (SB 391). The 2010 CHTS data will also be used to develop and calibrate regional travel demand models to forecast future travel behavior, predict associated criteria pollutants, and to meet other emerging modeling needs.

Regional agencies expressed their need for, and the benefits of a coordinated strategic statewide approach to conduct a household survey for travel behavior information and inter-regional (long-distance) trip data. As a result, Caltrans and the California Association of Councils of Government (CALCOG) formed the CHTS Steering Committee to develop a scope of work, create a funding plan, hire a consultant firm, and conduct the 2010 CHTS. In response to SB 375 requirements, to support the development of Regional Transportation Plans (RTP), and to meet statewide modeling and analysis needs, CALCOG presented a letter to the Strategic Growth Council on September 8, 2009, indicating consensus among the regions to seek Proposition 84 funds for the 2010 CHTS. Agencies need this data to respond to SB 375 requirements, to support development of the Regional Transportation Plans (RTP), and to meet statewide modeling and analysis needs. The California Energy Commission (CEC) and California Air Resources Board (CARB) also expressed their need for, and the benefits of a coordinated statewide approach to collect data on vehicle fuel consumption, congestion, and emissions. These data are vital for the future generation of energy consumption and emissions models.

BACKGROUND

The 2010 California Household Travel Survey, CHTS, will be conducted to provide data on regional trip activities and inter-regional trip activities that will be used for the statewide model and regional travel models. The CHTS data will be used to develop and calibrate regional travel demand models to forecast the 2015, 2020, 2035 and 2050 Greenhouse Gas emissions (GHG) and enable Senate Bill 375 and 391, and Governor's Executive Order S-21-09 implementation. Caltrans has conducted the CHTS every ten years since 1950 for planning and policy applications. The CHTS compliments other national survey efforts including the National Household Travel Survey (NHTS), the American Community Survey (ACS), the U.S. Census, and the Census Transportation Planning Products (CTPP). However, these survey efforts are limited in scope, are not inclusive of all modes of travel and travel activities, and are not adequate to meet the needs of SB 375 and SB 391. In addition, MPOs are developing advanced activity-based models requiring a more comprehensive survey database with added spatial information to address SB 375 and SB 391 policy questions. Therefore, an enhanced decennial update to the 2000/2001 CHTS is critically needed. The 2001 CHTS was the first comprehensive statewide activity-based household travel survey conducted in California. The 2001 Survey was a collaborative effort with Caltrans, MPOs and RTPAs that collected information from 17,000 households. The 2010 CHTS will create a new database of surveys containing data elements that can better address regional and statewide modeling needs.

Caltrans is managing the main CHTS survey effort, which primarily focuses on performing the Core Survey. The Core Survey is the primary travel survey that will be administered to more than 53,000 households throughout the State. The purpose of the Core Survey is to gather basic travel behavior data needed by the State and MPOs to calibrate their travel demand models. In addition to performing the Core Survey, Caltrans' contract contains a GPS and OBD survey component.

SCAG is managing the Survey Augment Project, which is focused on administering the Add-On Survey. The purpose of the Add-On Survey is to gather additional household, activity, and travel characteristics needed to estimate and calibrate next generation activity-based models. The Add-On Survey will be administered to a subset of randomly selected households and their household members who previously participated in the Core Survey. In addition, SCAG's contract will include conducting additional core and GPS surveys.